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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,983	01/25/2002	Junichiro Suzuki	011638	7623
23850	7590	02/17/2004		
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			EXAMINER BISSETT, MELANIE D	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/054,983	Applicant(s) SUZUKI ET AL. 
	Examiner Melanie D. Bissett	Art Unit 1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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1. The rejections based on 35 USC 103 have been maintained.

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darairaj et al. in view of Jadamus et al.
4. From a prior Office action:

Durairaj et al. discloses a vulcanizable polymer composition that has good adhesion to polyamide (column 3, lines 26-35). The polymer composition is made from ethylene propylene rubber (column 3, line 18), a resorcinol compound (column 4, lines 20-23), and a melamine compound (column 3, line 41), meeting those compositional aspects of claim 1. The ratio of melamine to resorcinol is the same as that in claim 2 (column 3, lines 47-49), and the amount of melamine and resorcinol in the composition is the same as the applicant claims in claims 3 and 4 (column 3, lines 45-46 combined with the ratio in column 3, lines 47-49). Durairaj et al., however, does not disclose the method for bonding the composition to polyamide or the vulcanizing agent that the applicant claims in claim 1.

Jadamus et al. discloses the common use of a peroxide vulcanizing agent to vulcanize a vulcanizable rubber compound (column 2, lines 26-28) and also discloses the applicant's claimed method for adhering a vulcanizable compound to a substrate (see Jadamus et al. claim 1). The advantage of using the method shown in Jadamus et al. is that a firm bond is formed between the vulcanizate and the substrate (column 57- 67).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the method in Jadamus et al. with the polymer in Durairaj et al. The motivation for doing so would be to create a firm bond between a polyamide substrate and the resulting vulcanizate. Therefore it would have been obvious to combine Jadamus et al. with Durairaj et al. to obtain the invention as specified in claims 1-4.

Regarding the vibration-insulating properties the applicant claims, appearing in the preambles of claims 1-4 of the present invention, this is a property inherent to a given material. As such, any material that fulfills the applicant's material claims fits these property claims as well. The combination of Jadamus et al. and Durairaj et al. meets the material and structural claims set forth by the applicant, as shown above. Therefore even though the combination of these references

does not focus on the vibration-dampening aspects of the invention, it still anticipates this aspect of claims 1-4.

### ***Response to Arguments***

5. In response to the applicant's arguments that the Durairaj reference does not disclose a peroxide vulcanizing agent but instead discloses a sulfur vulcanizing agent, it is first noted that the examiner recognizes that Durairaj does not teach a peroxide vulcanizing agent. The Jadamus reference has been used to teach such a limitation. Durairaj teaches that any conventional vulcanizing method may be used, since the focus is on the use of the methylene acceptor compound (col. 3 lines 50-57). Jadamus teaches a conventional vulcanization technique, where peroxide and silane compounds are used to vulcanize the same rubber materials as those in Durairaj. Note that Jadamus also teaches that peroxides are preferred over sulfur vulcanizing agents to improve heat resistance (col. 2 lines 25-28). Although Durairaj does not teach peroxide vulcanizing agents, the use of such a conventional vulcanizing agent, as taught by Jadamus, would have been obvious.

6. Regarding the applicant's arguments that the primary reference only teaches forming a composite body of natural rubber and metal wire, the examiner has pointed to the reference's teaching of ethylene propylene rubber (col. 3 lines 13-18) on several substrates, including nylon or polyamide (col. 3 lines 26-35). Jadamus also teaches ethylene propylene rubber on polyamide substrates; thus, the references are combinable.

7. In response to the applicant's arguments that the Jadamus reference requires the use of a silane compound, it is noted that it is the examiner's position that it would have been prima facie obvious to use the method of Jadamus' teaching in combination with Durairaj's rubber composition to provide a composite having improved adhesion or bonding to the substrate. This would include the use of silane compounds in the rubber composition, which Jadamus suggests for improving the bonding to the substrate. The claims encompass additional components, including silane compounds.
8. Regarding the applicant's arguments that the adhesion using silane double bond compounds and peroxide vulcanizing agents is insufficient, it is noted that the Jadamus inventors felt that the adhesion was sufficient for bonding a rubber material to a polyamide substrate. The applicant has not provided sufficient evidence that such an adhesion is "insufficient". Regardless, one of ordinary skill in the art considering the Jadamus reference would expect the compositions having silane compounds and peroxide agents to bond well to polyamide substrates. It is the examiner's position that one of ordinary skill in the art would expect success with the combination of Durairaj and Jadamus, based on the suggestions of the references.
9. In response to the applicant's arguments that one would not separate the peroxide and silane compounds based on Jadamus' teaching, it is the examiner's position that the combination of Durairaj and Jadamus would not require such a separation. Rather, the method envisioned by Jadamus would be used in combination with Durairaj's rubber compositions.

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10. Regarding the applicant's arguments that Durairaj focuses on the combination of a resorcinol compound, a melamine resin, and a sulfur vulcanizing agent, it is the examiner's position that the specific vulcanizing agent is not a concern of Durairaj. Rather, Durairaj focuses on the combination of rubber compounds with the resorcinol and melamine resin materials. The vulcanization method includes any conventional method.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

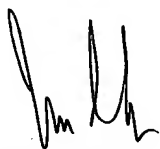
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdb



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